

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for Advanced Wireless Services)	WT Docket No. 04-356
in 1915-1920 MHz, 1995-2000 MHz, 2020-2025)	
MHz and 2175-2180 MHz Bands)	
)	
Service Rules for Advanced Wireless Services)	WT Docket No. 02-353
in the 1.7 GHz and 2.1 GHz Bands)	

**REPLY COMMENTS OF
CTIA – THE WIRELESS ASSOCIATION™**

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CTIA – THE WIRELESS ASSOCIATION™**

CTIA – The Wireless Association™ (“CTIA”) hereby submits these reply comments in response to the initial round of comments in the above-captioned proceeding.¹ The *NPRM* proposes licensing, service, and technical rules for the 1915-1920/1995-2000 MHz band (“H block”) and the 2020-2025/2175-2180 MHz band (“J block”) – spectrum the FCC has designated for advanced wireless services (“AWS”).² CTIA applauds the Commission’s goal “to enable service providers to maximize the use of this spectrum” and supports adoption of flexible, market-oriented service rules that will allow “the marketplace, not the government, [to] determine how this spectrum should be used.”³ At the same time, the Commission has a responsibility to protect adjacent PCS licensees and their millions of subscribers from harmful

¹ See In the Matter of Service Rules for Advanced Wireless Services in 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263 (2004) (“*NPRM*”).

² See Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Sixth Report and Order, Third Memorandum Opinion and Order and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 (2004) (“*AWS Sixth Report and Order*”).

³ *NPRM* at ¶ 2.

interference, and so must adopt technical limits in the 1915-1920 MHz portion of the H block that will protect legacy PCS handsets from significant and widespread interference.

I. INTRODUCTION AND SUMMARY

As a general matter, the comments demonstrate strong support for the *NPRM*'s proposed flexible use, market-oriented service rules – provided the Commission adopts adequate safeguards to ensure that H Block operations in the 1915-1920 MHz band do not create harmful interference to existing PCS handsets.

With respect to licensing and service rules, the record established widespread support for flexible service rules and a “PCS model” regulatory framework. Further, several commenters urge the Commission to adopt PCS geographic area licenses for the H block and Regional Economic Area Grouping (“REAG”) licenses for the J block.

The Commission should roundly reject several backward-looking, command-and-control, and unsubstantiated proposals that would limit the potential of the H and J block spectrum. In particular, the Commission should reject MCI's suggestion to bar existing broadband providers (over any platform) from bidding on this spectrum; NTCH's suggestion to set-aside half of the spectrum for small business bidders; the proposals of the Rural Telecommunications Group and NTCH to impose strict build-out requirements and a “keep what you use” performance requirement; and the suggestion by TerreStar Networks to adopt a 1 MHz guard band within the upper portion of the H block. In addition, the Commission should find that the opposition of the American Skin Association and others to the RF emission proposals lacks sufficient substantiation and thus is without merit.

Finally, AWS operations in the H block will create a new interference dynamic for adjacent PCS operations – and the Commission must take the steps necessary to protect PCS operations and the millions of PCS handsets currently in operation from harmful interference.

II. GENERAL REGULATORY FRAMEWORK

A. The Record Confirms that the Commission Should Adopt Flexible Spectrum Use and a “PCS Model” Regulatory Framework with Appropriate Interference Limits

In the initial round of comments, several parties expressed support for flexible spectrum use “provided technical restrictions are imposed to protect incumbent PCS operations from potential harmful interference.”⁴ As CTIA previously observed, the Commission should allow any use permitted by the Table of Allocations – with adequate safeguards to protect PCS operations from the new interference paradigm created by the AWS designation in the H block.

CTIA also reiterates its strong support for a “PCS model” regulatory framework for the H and J blocks. Although CTIA did not object to the Commission’s tentative conclusion to license the H and J blocks under the regulatory framework of Part 27 of the Commission’s rules, it strongly urged the Commission to adopt technical rules consistent with the Part 24 Broadband PCS rules (and any technical limits required to address interference concerns affecting existing PCS operations).⁵

Consistent with CTIA’s “PCS model” approach, several parties urged the Commission to regulate the H block under Part 24 given its adjacency to Broadband PCS spectrum and the

⁴ Comments of United States Cellular Corporation, WT Docket Nos. 04-356 & 02-353, at 1 (filed Dec. 8, 2004)(“Comments of United States Cellular”); *see also* Comments of T-Mobile USA, Inc., WT Docket Nos. 04-356 & 02-353, at 1 (filed Dec. 8, 2004)(“Comments of T-Mobile”)(“[I]t is critical that the Commission adopt appropriate protections for incumbent operations in this proceeding as well as flexible service rules”).

⁵ *See* Comments of CTIA - The Wireless Association™, WT Docket Nos. 04-356 & 02-353, at 4 (filed Dec. 8, 2004)(“Comments of CTIA”).

potential for H block operations to be incorporated into PCS systems.⁶ In particular, commenters expressed concern that if the H block were subject to Part 27 rules, manufacturers would be forced to obtain equipment certifications under Part 24 *and* Part 27 rules for any equipment that operates across the PCS spectrum and the H block spectrum. As Motorola states, “such a requirement would be unduly burdensome for manufacturers and would result in increased prices for handsets.”⁷ CTIA shares this concern and urges the Commission to adopt a regulatory framework fully consistent with the “PCS model.”

B. The Record Confirms that the Commission Should Adopt PCS Licensed Service Areas for the H Block and REAG Service Areas for the J Block

Many commenters support CTIA’s position that the Commission should license the H block on a geographic area basis consistent with the licensed areas used in the Broadband PCS licensing regime. Adoption of PCS licensed areas would take into account the H block’s immediate adjacency to PCS spectrum and its potential to be used as complementary spectrum to existing PCS offerings.⁸ T-Mobile, for example, notes that Basic Trading Area (“BTA”) service areas would be “very appropriate given the past licensing practices for Broadband PCS.”⁹ Nextel, moreover, observes that licensing the H block on a BTA basis would provide entities

⁶ See, e.g., Comments of Motorola, Inc. WT Docket Nos. 04-356 & 02-353, at 12 (filed Dec. 8, 2004)(“Comments of Motorola”); Comments of Nextel, WT Docket Nos. 04-356 & 02-353, at 2-7 (filed Dec. 8, 2004)(“Comments of Nextel”); Comments of Rural Cellular Association, WT Docket Nos. 04-356 & 02-353, at 5-6 (filed Dec. 8, 2004)(“Comments of Rural Cellular Association”).

⁷ Comments of Motorola at 12.

⁸ See Comments of T-Mobile at 12-13; Comments of Nextel at 49-53. Although the *NPRM* observes that BTA licensing is not presently available due to licensing issues with Rand McNally, see *NPRM* at nn. 47, 53, CTIA reiterates that the proximity of the H block to PCS spectrum suggests that the most economically efficient outcome would be for the Commission to negotiate an additional blanket license with Rand McNally for this block of spectrum. CTIA is prepared to work cooperatively with the Commission and Rand McNally toward this end.

⁹ See Comments of T-Mobile at 12-13.

interested in serving a single area with an opportunity to bid on the BTA for that area alone, while at the same time allowing both large and small CMRS providers “to expand and supplement their existing spectrum holdings in a cost-effective manner.”¹⁰

T-Mobile properly notes that a BTA licensing scheme is far more appropriate than an MSA/RSA approach.¹¹ First, given the proximity to Broadband PCS and the fact PCS is licensed on a BTA basis, “it would be difficult to incorporate H block spectrum into providers’ existing networks if it were licensed on an MSA/RSA-level.”¹² T-Mobile observes, moreover, that the Commission recently allotted AWS spectrum on an MSA/RSA basis in the *1.7/2.1 GHz AWS Order* so spectrum in these sized blocks will soon be available.¹³ In addition, T-Mobile adds that interference coordination would be more manageable with fewer licensees, as in the PCS model.

While CTIA supports the *NPRM*’s view that some applications may only be effective and highly valued if offered on a nationwide basis, it opposes MCI’s proposal to impose a nationwide

¹⁰ Comments of Nextel at 51.

¹¹ See Comments of T-Mobile at 13. CTIA notes that some commenters generally support adoption of CMRS geographic service areas for the H block – either BTAs or MSAs/RSAs. Their comments, nevertheless, underscore the benefits of licensing the H block on a geographic basis consistent with the adjacent PCS spectrum. See Comments of NTCH, Inc., WT Docket Nos. 04-356 & 02-353, at 3 (filed Dec. 8, 2004)(“Comments of NTCH”)(“By making the spectrum available in similar sized units to their natural adjuncts, the Commission can make them most useful and most precisely tailored to the needs of the PCS/cellular carriers and their customers.”); Comments of Rural Cellular Association at 2-3 (“[T]o the extent that H-block licenses will supplement spectrum holdings of operating carriers, the ability to purchase spectrum for exactly or nearly exactly the area needed, and no more than needed, offers carriers the best and most economical option for introduction of advanced data services.”)

¹² Comments of T-Mobile at 13.

¹³ See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162, 25176 (2003) (“*1.7/2.1 AWS Order*”).

licensing scheme on this spectrum.¹⁴ Nextel also opposes a single, nationwide license, noting that it would significantly restrict the pool of bidders interested in the spectrum.¹⁵ United States Cellular notes further that nationwide licensing “will not maximize the opportunity to provide the widest array of services and business plans.”¹⁶ CTIA reiterates that the Commission could adopt a combinatorial bidding methodology that could be used by bidders to achieve the sized license area they prefer – including nationwide coverage – if such bidding proves to be feasible after a full evaluation.¹⁷

In addition, CTIA strongly opposes the proposal by UTStarcom, Inc. to license the H block on a per-county basis. As the *NPRM* observes, “geographic area licensing permits economies of scale because it allows a licensee to coordinate usage across an entire geographic area to maximize the use of spectrum.”¹⁸ The Commission has never licensed radio spectrum on a per-county basis because it would effectively eliminate any economies of scale in deployment. Further, the straight line geopolitical boundaries typically used to define county borders do not match RF contours, complicating build-out and frequency coordination between adjacent systems. Moreover, to the extent entities wish to offer service in smaller geographic areas, the Commission’s partitioning, disaggregation, and secondary markets leasing policies have proven to be effective means to tailor spectrum needs to individual business plans.¹⁹

¹⁴ See Comments of MCI, Inc., WT Docket Nos. 04-356 & 02-353, at 3-4 (filed Dec. 8, 2004)(“Comments of MCI”).

¹⁵ See Comments of Nextel at 52.

¹⁶ Comments of United States Cellular at 4.

¹⁷ See Comments of CTIA at 5.

¹⁸ *NPRM* at ¶ 19.

¹⁹ See Comments of CTIA, WT Docket No. 02-381 (filed Jan. 14, 2005) (providing specific data with respect to the number of partitioning, disaggregation, and leasing arrangements parties have entered)(“CTIA Rural Wireless Comments”).

With respect to the J block, the comments resoundingly support adoption of a geographic area licensing scheme using larger areas, such as the twelve Regional Economic Area Groupings (“REAG”). As the Rural Cellular Association noted, “[t]he J-block spectrum is less likely to be integrated into the non-adjacent PCS operations of wireless carriers.”²⁰ T-Mobile concurs, asserting that “[w]ith the economies of scale and scope not as present for the J block, the Commission should strive to provide large geographic licensing areas to enable auction winners to have some level of scale and scope to attract equipment manufacturer interest in the spectrum.”²¹ CTIA supports use of REAGs for the J block spectrum. As the Commission observed in the *1.7/2.1 AWS Order*, “[t]hese types of large licensing areas permit carriers to take advantage of economies of scale and they allow service providers greater flexibility in the build-out of their services, since they are less constrained by geographical license limits.”²²

Ultimately, a mix of different sized geographic areas best serves the Commission’s goal of balancing efficiency with the dissemination of licenses among a variety of applicants. CTIA believes that in considering the size of geographic area licenses in the H and J blocks, the Commission should take into account its recent actions in the *1.7/2.1 AWS Order*, which adopted spectrum blocks ranging from REAGs to Economic Areas (“EAs”) to MSAs/RSAs. Adopting PCS market areas in the H block and REAGs in the J block, in conjunction with the geographic licenses that will become available in the 1.7 / 2.1 GHz AWS spectrum bands, will provide varying geographic area opportunities both for existing wireless providers and new entrants.

²⁰ Comments of the Rural Cellular Association at 4.

²¹ Comments of T-Mobile at 14.

²² *1.7/2.1 AWS Order*, 18 FCC Rcd at 25176.

III. LICENSING AND OPERATING RULES

A. The Commission Should Reject Eligibility Restriction and Closed Bidding Proposals

CTIA supports the *NPRM*'s tentative conclusion against imposing eligibility restrictions and closed bidding and thus urges the Commission to reject the proposals contained in the MCI and NTCH comments.²³ As the *NPRM* observed, "opening these bands to as wide a range of applicants as possible would encourage efforts to develop new technologies and services, while helping to ensure efficient use of this spectrum."²⁴

The Commission has previously determined that eligibility restrictions may be imposed "only when open eligibility would pose a significant likelihood of substantial harm to competition in specific markets and when an eligibility restriction would be effective in eliminating that harm."²⁵ Nonetheless, MCI urges the Commission to " earmark this allocation for new market entrants" by prohibiting existing broadband services providers (over any platform) from bidding on this spectrum.²⁶ Despite the Commission's long-standing policy to rely on market forces in licensing "absent a compelling showing that regulatory intervention to exclude potential participants is necessary,"²⁷ MCI makes no cogent argument to support its

²³ See *NPRM* at ¶ 67.

²⁴ *Id.* at ¶ 69.

²⁵ *Id.*

²⁶ Comments of MCI at 2.

²⁷ *NPRM* at ¶ 69 & n.157 (citing Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, *Report and Order*, 18 FCC Rcd 23318, 23346-47 (2003); Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range, Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates, and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2-12.7 GHz Band, *Memorandum Opinion and Order and Second Report and Order*, 17 FCC Rcd 9614, 9677-82 (2002); Amendment of Parts 1, 2, 87 and 101 of the

incredible proposal. Instead, it relies on tired rhetoric and unsubstantiated conclusions. CTIA agrees with the Commission that “opening these bands to as wide a range of applicants as possible would encourage efforts to develop new technologies and services” and urges the Commission to summarily reject the proposal.

The Commission should likewise reject NTCH’s proposal to impose closed bidding on half of the spectrum at issue here.²⁸ As an initial matter, the *NPRM* did not seek comment on closed bidding or set-aside licenses but instead proposed to make bidding credits available to small businesses seeking to acquire the spectrum.²⁹ The Commission has not adopted a set-aside for entrepreneurs in any auction other than the Broadband PCS C and F auctions and the subsequent reauctions. In fact, the Commission has declined on numerous occasions to establish set-asides for other auctioned services, finding that set-asides are unnecessary and that open auctions are effective in promoting small business participation.³⁰ Indeed, open auctions with bidding credits and other regulatory measures have proven to be more effective in enabling small businesses to acquire licenses and construct systems. As the Commission has noted, small businesses comprise nearly 80 percent of winning bidders in all of the Commission’s open

Commission's Rules To License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16948-49 (2000); Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz, *Report and Order and Second Notice of Proposed Rule Making*, 12 FCC Rcd 18600, 18619-20 (1997)).

²⁸ Comments of NTCH at 4-5.

²⁹ See *NPRM* at ¶¶ 119-125.

³⁰ See Reply Comments of CTIA, Report No. AUC-03-58-A (Auction No. 58), DA 04-1639, at 2 (filed July 15, 2004). Most recently in the *1.7/2.1 GHz AWS Order*, the Commission chose not to adopt a set-aside. “We do not see a need to supplement the incentives for small business participation provided elsewhere in this order by foreclosing any of the licenses to other bidders.” *1.7/2.1 GHz AWS Order*, 18 FCC Rcd at 25189.

auctions utilizing bidding credits.³¹ As such, the Commission should reject NTCH's proposal and adopt the competitive bidding policies – including the designated entity bidding credits – proposed in the *NPRM*.

B. The Commission Should Reject Performance Requirement Proposals

In response to the *NPRM*'s inquiry into performance requirements,³² T-Mobile, like CTIA, urged the Commission to consider whether already existing strong market incentives obviate the need for any regulatory performance requirements in the AWS bands.³³ At most, the Commission should adopt a substantial service requirement at license renewal.

The Commission should squarely reject NTCH's proposal to impose a two-year build-out requirement.³⁴ The proposal runs counter to the Commission's recent decision to extend the substantial service benchmark option "to all wireless services that are licensed on a geographic basis" and to reject recommendations for "stricter, more specific build-out obligations."³⁵ Particularly where, as is the case here, there is a broad range of new and innovative service offerings contemplated, the Commission has refrained from imposing specific performance requirements on licensees out of concern that inflexible performance requirements might impair

³¹ See *1.7/2.1 GHz AWS Order*, 18 FCC Rcd at 25219-20.

³² See *NPRM* at ¶ 74.

³³ Comments of T-Mobile at 16.

³⁴ See Comments of NTCH at 8.

³⁵ Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 02-381, *Report and Order*, 19 FCC Rcd 19078, ¶¶ 75 & 78 (rel. Sept. 27, 2004) ("*Rural Wireless Order*").

innovation and unnecessarily limit the types of service offerings licensees can provide.³⁶ NTCH does not address why this AWS spectrum should be treated differently.

Likewise, although the Rural Telecommunications Group argues that the substantial service benchmark does not serve rural areas, it fails to address the Commission's recent finding that substantial service serves the public interest by "increas[ing] [licensees'] flexibility to develop rural-focused business plans and deploy spectrum-based services in more sparsely populated areas without being bound to concrete population or geographic coverage requirements."³⁷ T-Mobile, moreover, argues against specific build-out requirements, noting that "the tight protection levels needed to protect incumbent PCS operations will require some time to be developed and deployed, further arguing against performance requirements that might make the H block less appealing to industry."³⁸

The Commission should also dismiss consideration of the "keep what you use" proposal suggested by the Rural Telecommunications Group.³⁹ As CTIA recently noted in response to a Commission inquiry on this issue in the *Rural Wireless Further Notice of Proposed Rulemaking*,

³⁶ See *1.7/2.1 AWS Order*, 18 FCC Rcd at 25167-68; Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, 15 FCC Rcd 5299, 5332 (2000); Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz, ET Docket No. 95-183, *Report and Order and Second Notice of Proposed Rulemaking*, 12 FCC Rcd 18600, 18623 (1997); Rulemaking To Amend Parts 1, 2, 21, and 25 Of the Commission's Rules to Redesignate The 27.5-29.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies for Local Multipoint Distribution Service And for Fixed Satellite Services Petitions for Reconsideration of the Denial of Applications for Waiver of the Commission's Common Carrier Point-to-Point Microwave Radio Service Rules; Suite 12 Group Petition for Pioneer Preference, CC Docket No. 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 12545, 12659 (1997).

³⁷ *Rural Wireless Order* at ¶ 76.

³⁸ Comments of T-Mobile at 16.

³⁹ Comments of the Rural Telecommunications Group, WT Docket Nos. 04-356 & 02-353, at 5 (filed Dec. 8, 2004).

a “keep what you use” proposal would force licensees into a Hobson’s choice of either making uneconomic investments to “save” a license or forfeiting licensed spectrum (even though entry may be justified in the future).⁴⁰ A “keep what you use” regime may, for example, require a licensee to deploy infrastructure based on existing less efficient narrowband technologies when new more efficient wideband technologies are on the horizon. Such investments also may be at the expense of economically prudent and timely investment in other portions of a licensee’s service area. Customers of the carriers, rural and otherwise, will be harmed by a government mandate that would force uneconomic investment.⁴¹ Further, adoption of the “keep what you use” proposal will send the financial community the ill-advised message that wireless licensees may not be able to protect the integrity of their licensed areas unless they pursue uneconomic construction of facilities in sparsely populated areas.

C. The Commission Should Establish Band Clearing Rules that Include a New Cost-Sharing Clearinghouse in the 2110-2150 MHz and 2175-2180 MHz Bands

The *NPRM* seeks comment on whether to adopt rules to address relocation processes and cost-sharing among new AWS licensees in the 2110-2150 MHz and 2175-2180 MHz bands.⁴² CTIA supports adoption of a band clearing plan in which relocation costs are be shared by all licensees that benefit from the clearing of incumbent operations. In particular, CTIA generally supports adoption of the Part 24 cost sharing procedures based on the successful model of the

⁴⁰ See CTIA Rural Wireless Comments at 3.

⁴¹ *Id.* at 14-15.

⁴² See *NPRM* at ¶ 49.

Broadband PCS incumbent microwave relocation cost-sharing experience. CTIA also concurs with certain comments that make specific proposals regarding a band clearing plan.⁴³

The Commission asks what entity should be assigned the responsibility to administer the clearinghouse function.⁴⁴ CTIA takes this opportunity to note that it wishes to be considered as a clearinghouse candidate. CTIA will submit more details on its clearinghouse function proposal to the Commission at an appropriate time.

IV. TECHNICAL RULES

A. The Commission Should Adopt H Block Technical Limits that Protect PCS Operations from Harmful Interference

As CTIA noted in its initial comments, the introduction of AWS operations into the 1915-1920 MHz portion of the H block raises new and significant interference questions for Broadband PCS operations. Currently there are more than 170 million wireless subscribers in the United States – the majority of whom use mobile devices that can operate in the PCS band. There is no dispute that these units, as well as those in the delivery pipeline and in manufacturing facilities, were designed when the 1915-1920 MHz band was designated for unlicensed use and posed no practical risk of interference into the PCS mobile receive band.

The Commission acknowledged that with the decision to designate the H block for AWS, “we are concerned about potential interference from handsets transmitting in the 1915-1920 MHz band to PCS handsets receiving in the 1930-1990 MHz band.”⁴⁵ The independent tests CTIA commissioned and attached to its initial comments demonstrate that the Commission must

⁴³ See Comments of PCIA, the Wireless Infrastructure Association, WT Docket Nos. 04-356 & 02-353 (filed Dec. 8, 2004); Comments of the PCIA Microwave Clearinghouse, WT Docket Nos. 04-356 & 02-353 (filed Dec. 8, 2004).

⁴⁴ See *NPRM* at ¶ 48.

⁴⁵ *Id.* at ¶ 86 (*references omitted*).

closely examine the overload, intermodulation and out-of-band emission (“OOBE”) interference risks that H block operations could create for current PCS handsets. CTIA urges the Commission to adopt power and OOBE limits for handsets operating in the H Block that protect incumbent licensees from harmful interference, while at the same time recognizing the technical limitations of difference technologies.

B. The Commission Should Reject MSS/ATC Claims to Impose a Guard Band at 1999-2000 MHz

As CTIA and several other parties observed in the initial round of comments, MSS/ATC operations in the 2000-2020 MHz band would result in significant risk of interference to H block operations in the 1995-2000 MHz band.⁴⁶ Parties also noted that there is the potential for interference from H block operations into MSS/ATC spectrum as well.⁴⁷ As the record reflects, these issues require further study. In no case, however, should the Commission entertain the proposal by TerreStar Networks, Inc. to impose a 1 MHz guard band in the upper portion of the H block, from 1999-2000 MHz.⁴⁸

AWS spectrum is highly valued (as demonstrated by the significant interest in this proceeding) and should not be redesignated for guard band use. As an initial matter, when the Commission reallocated 30 MHz of spectrum (including 1995-2000 MHz) from MSS to Fixed and Mobile services in 2003, it concluded that “we need to make spectrum available for

⁴⁶ See Comments of CTIA at 25-26; Comments of Motorola at 9; Comments of T-Mobile at 11.

⁴⁷ See, e.g., Comments of Motorola at 9; Comments of T-Mobile at 11.

⁴⁸ See Comments of TerreStar Networks Inc., WT Docket Nos. 04-356 & 02-353, at 6 (filed Dec. 8, 2004).

terrestrial wireless services to promote the introduction of new advanced services.”⁴⁹ Imposing a 1 MHz guard band in the upper portion of the H block, from 1999-2000 MHz, would preclude deployment in the H block of wideband technologies, such as WCDMA, that utilize 5 MHz carrier channels.

As part of the reallocation decision, the Commission further noted that terrestrial wireless service “ha[s] seen substantially higher subscribership growth than MSS, even though both services share nearly the same amount of spectrum.”⁵⁰ In contrast, the Commission observed that “MSS milestone review is an ongoing process that spans several years, and it is possible that not all currently authorized MSS networks will be deployed.”⁵¹ Indeed, significant questions remain whether the 2 GHz MSS entities will offer service, as milestone compliance filings and satellite modification requests remain pending. As such, it is unclear whether the 40 MHz of MSS spectrum at 2 GHz remains necessary. The Commission, moreover, left undecided the appropriate use of “additional abandoned spectrum” that may result after future milestone reviews are completed.⁵² Given these circumstances, while the Commission may wish to consider TerreStar’s proposal in the MSS spectrum at 2000 MHz and above, it should unequivocally reject any suggestion to create a guard band in the H block spectrum.

⁴⁹ Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, RM-9498, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223, 2238 (2003)

⁵⁰ *Id.* at 2239.

⁵¹ *Id.* at 2240.

⁵² *Id.*

C. The Commission Should Reject Claims Regarding Human Exposure to RF Radiation Emissions

The *NPRM* tentatively concludes that the threshold for environmental review of fixed transmission facilities should be an ERP greater than 1000 watts, consistent with the Commission's decision in the *1.7/2.1 GHz AWS Order*.⁵³ Some comments were submitted asserting that this threshold was too high, while others more generally opposed authorization of AWS in the H and J blocks until the Commission adopts "adequate" safety precautions against radiofrequency ("RF") radiation emissions.⁵⁴ Contrary to these comments, the proposed RF exposure threshold is based on the state of the science and the limit of 1000 watts ERP has been established to protect the public.

The Commission's guidelines for human exposure to RF radiation from FCC-regulated transmitters and facilities are based on "recommendations of expert organizations and federal agencies with responsibilities for health and safety."⁵⁵ In 2004, the U.S. Court of Appeals for the D.C. Circuit concluded that "in formulating its RF regulation . . . the Commission has relied on other government agencies and non-governmental expert organizations with specific expertise on the health effects of RF radiation."⁵⁶ The court observed that the Commission has not "abdicated

⁵³ See *NPRM* at ¶ 114.

⁵⁴ See Letter of American Skin Association et al., WT Docket Nos. 04-356, 02-353 (filed Nov. 29, 2004); Comments of Richard A. Albanese, MD, WT Docket Nos. 04-356, 02-353 (filed Nov. 23, 2004); Comments of the Canyon Area Residents for the Environment (CARE), WT Docket Nos. 04-356, 02-353 (filed Nov. 23, 2004); Comments of Cindy Sage, WT Docket Nos. 04-356, 02-353 (filed Nov. 19, 2004); Comments of Karl Polzer, WT Docket Nos. 04-356, 02-353 (filed Nov. 18, 2004); Comments of the EMR Policy Institute, WT Docket Nos. 04-356, 02-353 (filed Nov. 18, 2004).

⁵⁵ Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934, *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 12 FCC Rcd 13494, 13505 (1997); *Cellular Phone Task Force*, 205 F. 3d 82, 90 (2d Cir., 2000).

⁵⁶ *EMR Network v. FCC*, No. 03-1366, at 5 (D.C. Cir. 2004).

its responsibilities” and has demonstrated that it “has an adequate ‘mechanism in place for accommodating changes in scientific knowledge.’”⁵⁷ As such, the Commission should reject these claims.

V. CONCLUSION

For the reasons discussed above, CTIA urges the Commission to adopt flexible use service rules, a “PCS model” regulatory framework, and PCS licensing areas in the H block and REAGs in the J block. Further, the Commission should reject unwarranted and unsubstantiated proposals that will only serve to limit the potential of the H and J block spectrum. Finally, CTIA urges the Commission to adopt H block technical limits necessary to protect PCS licensees from harmful interference.

Respectfully submitted,

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⁵⁷ *Id.* at 6 (quoting *Cellular Phone Task Force*, 205 F. 3d at 91).